

STATEMENT OF WORK
Waste Storage Facility (313)
New York State

These deliverables apply to this individual practice. For other planned practice deliverables refer to those specific Statements of Work.

Items marked with an asterisk (*) will be delivered to the Designated Conservationist

INVENTORY AND EVALUATION

Deliverables:

1. Show evidence in the design record of the following items:
 - a. That the type of farming operation, planned manure, waste management, and runoff handling system(s), as well as the producer's management level have been identified and discussed with the producer.
 - b. That the type of animals, herd size, average animal weight, average weight gain/milk production (if applicable), source, quantity and consistency of waste to be stored, bedding material, and volume of waste water (including any silage leachate, milkhouse waste, and other contaminated water or liquids that will be directed into the structure) are accurately accounted for in the Agricultural Waste Management Plan.
 - c. That the planned storage site location is feasible, giving consideration to manure transfer systems for the loading and unloading. Consideration has been given to existing building location, future expansion, access routes, traffic patterns, drainage, utilities, equipment capabilities, safety, neighbors, possible odor problems, siting, and appearances.
 - d. Evidence that the waste storage volume was calculated using the storage period from the unloading and spreading schedule from the CNMP.
 - e. Evidence that a geologic site investigation has been conducted by a qualified individual to determine if the soils are suitable for an earthen waste storage pond. Soil permeability, stability, foundation, seepage, and location of water table and bedrock should be part of the record.
 - f. The record should contain test results from a certified soils lab which show soils classification, and permeability (at the compactive effort to be achieved during construction). Results from the initial permeability test conducted on soil samples compacted to the anticipated *in situ* soil density condition should also be included.
 - g. All drawings associated with the geologic investigation as well as topographic mapping of the site including the location of buildings, utilities, access routes, and test pits, manure transfer pipelines, agitation and pump out ramps, existing and potential outlets for milkhouse waste, silage leachate, and other drains associated with the work.

DESIGN

Deliverables:

1. Design documentation that will demonstrate that the criteria in NRCS practice standard have been met and are compatible with other planned and applied practices.
 - a. Practice purpose(s) as identified in the conservation plan.
 - b. List of required permits to be obtained by the client.
 - c. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06).
 - d. List of facilitating practices
 - e. Show evidence in the design record that the following have been satisfied:
 - I. The waste storage volume from the CNMP is current and correct.
 - II. Any additional contributions to the waste storage pond's required volume from the farm have been accounted for. These may include but may not be limited to:
 - The direct runoff from the 25 year/24 hour storm event over the contributing area
 - Runoff from precipitation from the contributing watershed area over the storage period
 - Milkhouse waste (if any)
 - Any other waste or wastewater from agricultural sources on the farm that will be directed to or deposited in the waste storage pond.
 - Consideration of the volume of storage that will be taken by accumulated solids over time

STATEMENT OF WORK
Waste Storage Facility (313)
New York State

- f. Practice standard criteria related computations and analyses to develop plans and specifications including but not limited to:
 - i. Geology and Soil Mechanics (NEM Subpart 531a).
 - ii. Storage Volume and Maximum Operating Level.
 - iii. Structural, Mechanical and Appurtenances.
 - iv. Maximize Clean Water Diversion.
 - v. Environmental Considerations (e.g. liner failure, location, breaching, air quality).
 - vi. Safety Considerations (NEM Part 503- Safety, Subpart A, 503.06 through 503.12).
2. Written plans and specifications including sketches and drawings shall be provided to the client that adequately describes the requirements to install the practice and obtain necessary permits.
3. Design Report and Inspection Plan as appropriate (NEM Part 511, Subpart B Documentation, 511.11 and Part 512, Subpart D Quality Assurance Activities, 512.30 through 512.32).
4. ***Operation and Maintenance Plan.**
5. ***In cases where the practice location has changed, a statement to NRCS notifying the agency of the change in location as well as a map showing the new practice location. The statement will include the landowner's name, program name, contract number and practice name.**
6. ***Signed Warranty of Technical Services Provided** form indicating compliance with practice standard criteria and applicable laws and regulations.
7. Design modifications during installation as required.

INSTALLATION

Deliverables

1. Delay of installation until TSP receives written verification from NRCS that all NEPA requirements have been satisfied for this practice.
2. Pre Installation conference with client and contractor.
3. Verification that client has obtained required permits.
4. Staking and layout according to plans and specifications including applicable layout notes.
5. Installation inspection (according to construction inspection plan as appropriate).

Show evidence in the inspection record that:

 - A. Site visits had been conducted as frequently as necessary to assure that the pond has been constructed according to the construction drawings and specifications. All major field changes from the approved construction drawings and specifications have been reviewed and approved by the Principal Designer and initialed. Make sufficient progress checks to document the following:
 - That required erosion and sediment control measures had been installed according to the plan, PRIOR to any construction activities taking place.
 - That the site had been properly prepared, including the stripping of topsoil and removal of structures or debris.
 - Final excavation depths have been surveyed and recorded.
 - Periodic observation of the fill material, moisture content and compaction procedures had been made and recorded to assure adequate embankment construction according to specification requirements. Also, assurance that the topsoil thickness is as specified where required.
 - Check concrete installation including grades, forms, steel, construction joints, mix design, placing, consolidation and curing. Perform slump, air, and strength tests of concrete when called for by inspection plan. Be certain to obtain the concrete batch tickets. All test results and batch tickets are to be filed in the inspection record.
 - Record and file in the inspection record the type, size, quality and quantity of the construction materials brought to the site PRIOR to installation.
 - Check the installation of the manure transfer systems, and other structures and materials for size, location, grade, elevation, joint tightness and other design factors.
 - Document finished elevations, dimensions and side slopes of embankments.

STATEMENT OF WORK
Waste Storage Facility (313)
New York State

- B. Prior to the completion of construction, schedule and complete a final construction check with the landowner, contractor, and the Approving Official present. During this final construction check, assure that the:
- Cut slopes are inspected for seepage and evaluate the need for any additional interceptor sub-surface drainage;
 - Construction spoil and debris are properly disposed of;
 - Required depth markers or gauges, fencing, safety gates, and signage is installed according to the construction drawings and specifications, and,
 - Final seeding requirements have been installed in accordance with the seeding plan.
 - Document the progress of the construction in the inspection record or a similar job log as required. In addition, photographs documenting construction progress are useful and will be taken.
6. Facilitate and implement required design modifications with client and original designer.
7. ***Advise client/NRCS on compliance issues with all federal, state, tribal, and local laws, regulations and NRCS policies during installation.**
8. ***Signed *Warranty of Technical Services Provided* form indicating compliance with practice standard criteria and applicable laws and regulations.**

CHECK OUT

Deliverables

1. ***As-Built documentation.**
 - a. **Extent of practice units applied**
 - b. **Drawings**
 - c. **Final quantities**
2. ***Signed *Warranty of Technical Services Provided* form indicating compliance with practice standard criteria and applicable laws and regulations.**
3. Progress reporting.

REFERENCES

- NRCS Field Office Technical Guide (eFOTG), Section IV, Conservation Practice Standard - Waste Storage Facility, 313.
- NRCS Agricultural Waste Management Field Handbook (AWMFH)
- NRCS National Engineering Manual (NEM).
- NRCS National Environmental Compliance Handbook
- NRCS Cultural Resources Handbook